

REMARKS

Claims 1-25 are pending in the current application. In an Office Action dated March 12, 2009, the Examiner rejected claims 17-20 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter; rejected claims 1-11 and 13-25 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,990,179 ("Morrow"), in view of U.S. Patent 6,850,766 ("Lau"), and further in view of U.S. Patent 7,366,285 ("Parolkar"); and rejected claim 12 under 35 U.S.C. §103(a) as being unpatentable over Morrow in view of Lau further in view of Parolkar and further in view of U.S. Patent 5,774,525 ("Kanevsky"). Applicant's representative respectfully traverses these rejections.

Response to Rejection under 35 U.S.C. §101

The preamble of claim 17 has been amended to comply with 35 U.S.C. §101. In particular, the method of claim 17 is directed to a computer program that is tied to a machine, namely a computer. Thus, under *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008), currently amended claim 17 is patentable subject matter under 35 U.S.C. §101.

Response to Rejection under 35 U.S.C. §103(a)

In rejecting claims 1, 17, and 21, the Examiner contends that Morrow, Lau, and Parolkar teach the elements of claims 1, 17, and 21. According to M.P.E.P. §2143 A, in light of *KSR International Co. v. Teleflex Inc.*, in order

[t]o reject a claim based on this rationale, Office personnel must *articulate . . . a finding* that the prior art included *each element claimed*, although not necessarily in a single prior art reference, *with the only difference being the lack of actual combination of the elements in a single prior art reference.* (emphasis added)

M.P.E.P. §2143 A also states the "[t]he rationale to support a conclusion that the claim would have been obvious is that *all the claimed elements* were known in the prior art." In addition, "[i]f any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious to one of ordinary skill in

the art.”

In rejecting claims 1, 17, and 21, the Examiner contends that:

“Marrow teaches presenting the contact with a predetermined out-calling dialog” and sites col. 2, lines 50-col. 3, lines 40. Applicant’s representative respectfully disagrees. Marrow does not teach establishing a dialog. A dialog is defined as a conversation between two parties (see e.g., Merriam-Webster’s Online Dictionary, 11th Edition). Instead, Marrow is actually directed to a system and method for determining the status of an answered telephone during the course of an outbound telephone call and applies only to the initial part of the phone call (Title, Abstract, Technical Field, col. 2, lines 44-46). As Marrow explains with reference to Figures 2 and 3, an automated telephone calling device places a telephone call to a location having a telephone number at which a target person is listed. When the telephone call is answered, the system determines whether a live person or an answering machine answers the call. When a spoken response is received from a live person, a speech recognition device performs a speech recognition analysis on the spoken response to determine a status of the spoken response. If the speech recognition device determines that the answering person is the target person, the speech recognition device initiates a speech recognition application with the target person. In other words, Marrow teaches that once the phone call is answered, an attempt is made to determine whether the target person is on the phone through speech recognition, and Marrow teaches nothing about establishing a dialog or conversation beyond this point. The description provided in col. 2, line 50 – col. 3, line 40 is merely a description of steps involved in calling a target person and the possible contingencies for after the phone call is answered by an answering machine or a live person. The system of Marrow asks a simple question to invoke a response from the live person and uses voice recognition to evaluate the response. Marrow does not teach or suggest that the system prepare or make any further questions or responses to interact with the person answering the telephone in the form of a conversation. Thus, no conversation actually takes place between the device and the person answering the telephone. In other words, the Examiner has not proven that Marrow teaches anything beyond a system that simply identifies whether a target person can be reached at the

target person's phone number based on voice recognition, which is not a dialog or conversation.

In rejecting claims 1, 17, and 21, the Examiner also contends that:

"Merrow does not specifically teach translating the contact's vocal responses to dialog into textual words using selected interactive voice response algorithms. Lau teaches translating the contact's vocal responses to the dialog into textual words using selected interactive voice response algorithms,"

and the Examiner sites col. 6, lines 15-28 of Lau. However, Lau does not teach translating the contact's vocal response to a dialog into "textual words" as the Examiner contends. When col. 6, lines 15-28 are actually read in context with Figures 2 and 4a of Lau, conversion of the response to a "text-like format" is carried out by a speech server 8 performs the operation of comparing the text-like format to a list of responses.

"Call setup firmware 108 represents firmware residing on the line interface card 20 of speech server 8 (FIG. 2). Once the call is established, call manager 22 initiates a call flow. A call flow is a sequence of voice prompts (either pre-recorded or generated by TTS engine 28), received responses (which are recognized by speech recognition engine 24) and calls to other resources, such as calls to databases 15 and 17. Voice prompts are provided to the end user and answers are received as indicated by arrows 108a and 108b."

The call flow carried out by the server 8 is then described with reference to Figure 4a as follows:

"An example of the initial portion of a call flow is provided in FIGS. 4a and 4b. The call flow begins at step 150 where a voice prompt is provided to the end user. This voice prompt can be either a pre-recorded message that is accessed and served up by call manager 22 or, for greater flexibility, the prompt could be a text message that is converted to speech through calls to TTS engine 28. As shown, the voice prompt at 150 requests information as to what destination the user seeks. As illustrated, four possible spoken responses will be considered valid when received and translated by speech recognition engine 24. These four valid responses are "shopping," "transportation," "points of interest" and "restaurant." Optionally, the voice prompt can list the four destination types that are available as valid responses. These are provided for example only. Numerous other destinations can be accommodated as well.

The user responds to the prompt by answering with his or her destination type. The response is passed by call manager 22 to speech recognition engine 24 where the response is converted into a text-like format and compared to the

grammar of acceptable responses. Depending upon the user's response, the call flow will proceed to either step 152, 154, 156, or 158. Although not illustrated for clarity, also contemplated in the preferred embodiments is a branch for error handling in the event the user's response is not recognized by speech recognition engine 24 or is recognized, but is an invalid response. Under those circumstances, the call flow could loop back to step 150 for a pre-set number of times, or could transfer the call to a human operator for further assistance. Other error handling routines, such as requesting responses in DTMF keypad format could also be employed." (emphasis added)

Thus, a careful reading of the text of Lau surrounding col. 6, lines 15-28 of Lau reveals that Lau actually teaches converting a response uttered by a user to a "text-like format" which is then compared to the grammar of acceptable responses (col. 6, lines 9-14) by the speech server 8. Lau teaches nothing about the "text-like format" being in a format that can be read by a human operator. When the uttered response is unrecognizable by the speech recognition engine 24, only then is a human operator connected to the user, but nowhere does Lau teach sending the text-like format to the human operator. In contrast, the terms "textual words" of claims 1, 17, and 21 are referring to actual written language that can be read by a human operator.

Because all the elements of claims 1, 17, and 21 are not taught or suggested by Merrow, Lau, and Parolkar, claims 1, 17, and 21 are patentable over Merrow in view of Lau and further in view of Parolkar.

Regarding claim 2, the Examiner contends that Merrow "teaches that selecting the contact from a set of contacts within a contact database" in col. 2, lines 45-49 of Merrow. However, Merrow teaches no such thing in col. 2, lines 45-49, which are reproduced as follows:

"The present invention is directed to a method of and system for determining the status of an answered telephone during the course of an outbound call. The system includes an automated telephone calling system which initiates a telephone call to a target person listed at a particular telephone number."

Clearly the two sentences in col. 2, lines 45-49 mention nothing about a database or an equivalent thereof or selecting the target person. Col. 2, lines 45-49 could simply be interpreted as an operating enters the telephone number of the target person and no database is used at all.

Regarding claims 5, 18, and 22, the Examiner contends that Merrow "teaches storing contact attributes in a contact database" in col. 2, lines 45-49. Applicant's representative can find no mention of storing contact attributes in a contact database in col. 2, lines 45-49. The Examiner also contends that "Parolkar teaches storing contact's vocal responses, textual words in a contact database and providing the operator with access to the contact database" in col. 3, lines 17-27, 61-67, col. 4, lines 1-3, which are reproduced as follows:

"In another aspect of present invention, the received answer is a textual representation of either a DTMF tone, VoiceXML or HTML speech tags. In yet another aspect of the present invention, the method of collecting information includes providing the answer to a user of the recipient device. In still another aspect of the present invention, the interactive script includes a first query and a second query that depends on the answer to the first query. In another aspect of the present invention, the method of collecting information includes translating the answer to the interactive script into text.

In another aspect of the present invention, the received answer is a textual representation of one of a DTMF tone, VoiceXML and HTML speech tags. In yet another aspect of the present invention, the answers to the query are provided to an agent at the final call destination. In still another aspect of the present invention, the interactive script includes a first query and a second query that depends on the answer to the first query. In another aspect of the present invention, the method of determining the final call destination includes translating the answers to the interactive script into text."

Applicant's representative can find no mention in col. 3, lines 17-27, 61-67 and col. 4, lines 1-3 of storing, or performing an equivalent operation, any information including textual words in a contact database, or allowing a user access to a database.

Regarding claim 6, the Examiner contends that "Lau teaches continuing a next portion of the out-calling dialog with contact while waiting for the human operator to become available" in col. 6, lines 15-28. Applicant's representative disagrees. The full paragraph in col. 6, lines 15-30 is reproduced as follows:

"The user responds to the prompt by answering with his or her destination type. The response is passed by call manager 22 to speech recognition engine 24 where the response is converted into a text-like format and compared to the grammar of acceptable responses. Depending upon the user's response, the call flow will proceed to either step 152, 154, 156, or 158. Although not illustrated for clarity, also contemplated in the preferred embodiments is a branch for error handling in

the event the user's response is not recognized by speech recognition engine 24 or is recognized, but is an invalid response. Under those circumstances, the call flow could loop back to step 150 for a pre-set number of times, or could transfer the call to a human operator for further assistance. Other error handling routines, such as requesting responses in DTMF keypad format could also be employed."

Careful reading of the paragraph of col. 6, lines 15-30 reveals there is no mention of continuing a dialog with a contact *while waiting for the human operator to become available*.

Regarding claims 7 and 23, the Examiner contends that "Lau teaches determining whether the contact is interested in the out-calling dialog and wherein connecting includes, connecting the contact to the operator, if the contact is interested" in Figure 4a and col. 6, lines 15-28. Careful reading of the paragraph of col. 6, lines 15-30 above reveals nothing about assessing the user's interest in a dialog, and the flow diagram also mentions nothing about assessing the user's interest. Lau is directed to a method where the user calls the system for assistance. Thus, certainly the user is already interested in establishing a dialog and there is no need to assess the user's interest. By contrast, methods of the present invention are directed to calling a contact, in which case the system may reach people who don't want to talk. Hence claims 7 and 21 are directed to assessing the contact's interest in establishing a dialog.

Regarding claims 8-11, the Examiner contends that "Lau teaches applying a set of heuristics to the textual words" and teaches "matching the textual words with predetermined keywords associated with interest" or "disinterest" in Figure 4a and col. 5, line 66 – col. 6, line 28. As defined and described in examples in the detailed description on page 7, line 7 – page 8, line 2, the term "heuristics" refers to keywords and keyword synonyms within a contact's response indicating the contact's interest or disinterest in the call. For example, the terms "sorry" and "not" occurring in an utterance made by a contact can be used to indicate disinterest in establishing a dialog. Lau does not teach or suggest an equivalent operation in Figure 4a, or col. 5, line 66 – col. 6, line 28. As already explained, Lau is directed to a method where *the user calls the system* for assistance. The user is most certainly already interested in establishing a dialog and there is no need to assess the user's interest. Thus, there is no teaching or suggesting anywhere

in Lau of assessing a user's interest. By contrast, methods of the present invention are directed to methods where a system *calls the contact*, in which case there may be contacts who don't want to talk. Hence claims 8-11 include the use heuristics in assessing a contact's interest in establishing a dialog.

Regarding claim 12, the Examiner has not established that Merrow in view of Lau and further in view of Parolkar teaches the elements of claims 7 and 11 from which claim 12 depends. Thus, claim 12 is patentable over Merrow in view of Lau and further in view of Parolkar and further in view of Kanevsky.

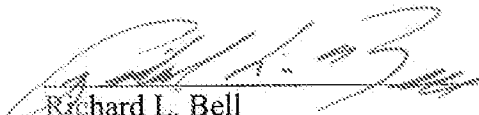
Regarding claim 13, the Examiner contends that "Merrow teaches terminating the call with the contact, if the contact is not interested" in col. 2, line 50-col. 3, line 40. In particular, col. 3, lines 7-40 describe various contingencies for determining whether the target person, an answering machine, or a person other the target person has been reached. However, there is no teaching or suggesting in col. 3, lines 7-40 of terminating the call based on a person's interest. Applicant's representative ask the Examiner to identify a particular statement in the list of all the possible contingencies of col. 3, lines 7-40, where Merrow teaches, in addition to applying voice recognition to determine whether the target person is on the phone, assessing an answering person's interest in establishing a dialog.

Regarding claims 14 and 15, as already argued above, Lau does not teach or suggest assessing a user's interest in establishing a dialog and the Examiner has not specifically identified in Lau where Lau describes a situation or step in the flow diagram of Figure 4a, and accompanying description in col. 5, line 56 – col. 6, line 30, in which Lau teaches or suggests handling a user who is not interested in establishing a dialog with the system of Lau.

Claims 16 and 24 are patentable over Merrow in view of Lau and further in view of Parolkar, because these references in combination do not teach or suggest all the claim elements of claims 16 and 24, as argued above with reference to claims 1, 17, and 21.

In Applicant's representative's opinion, all of the claims remaining in the current application are clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

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